Remarks

Reconsideration of this Application is respectfully requested. Applicant respectfully requests entry of the foregoing amendment after final because it places the claims in condition for allowance.

Upon entry of the foregoing amendment, claims 8-12, 17-19, 22, and 24-32 are pending in the application, with claims 8, 19, 26, and 28 being the independent claims. The amendments to the claims are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Examiner Interview

Applicants' representative thanks Examiner Ewald for the courtesy extended during the August 2, 2007 interview. During the interview, the structure of the flow rotator and the flow path through the flow rotator recited in the independent claims were discussed. In particular, the "curve, split, curve" flow path was discussed, as described in more detail below.

Rejections under 35 U.S.C. § 102

Claims 8, 9, 11, 17, 19, 22, 24, 26, and 27 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Deardurff *et al.* (U.S. 5,683,731). Applicants respectfully traverse the rejection.

Independent claims 8, 19, and 26 of the present application recite a flow rotator including an inlet, an arcuate inlet passage receiving melt from the inlet, and first and second outlet passages communicating with the inlet passage such that the flow of melt is split into two streams at a junction between the inlet passage and the outlet passages, wherein each outlet passage has a curved path from the junction to a respective first and second outlet. In summary, the claimed flow rotator includes an inlet, an arcuate inlet passage, then a split into two outlet passages, each of which is curved after the split (*i.e.*, "curve, split, curve"). Deardurff *et al.* does not disclose such a configuration.

If the inlet (28) of the Deardurff *et al.* redistributor is considered the inlet recited in the claims, then the inlet passage does not follow an arcuate path, as recited. Instead, the inlet passage of Dearduff *et al.* is straight and then splits into four streams. There is no arcuate path before the split, as recited in the claims of the present application. If one of the ramps/dividers (18) of the Dearduff et al. device is considered the inlet passage such that it follows an arcuate path, then there is no junction where the ramp (18) divides into two outlet passages after following the arcuate path. Instead, the ramps 18 simply divert some of the boundary layer (36) to downstream channels (32b and 32c). Accordingly, the Dearduff *et al.* patent does not disclose the "curve, split, curve" flow path recited in independent claims 8, 19, and 26.

Independent claims 8, 19, and 26 have been amended above to clarify that the downstream portion of the inlet passage is substantially perpendicular to the upstream melt passage "where the melt stream [or laminar flowing material] enters the inlet". This language has been added to clarify that the downstream portion of the inlet passage is not merely substantially perpendicular to any portion of the upstream melt passage, but instead, that portion of the upstream melt passage where the melt stream/laminar flowing material enters the inlet. Applicants maintain that the claims are not anticipated by Dearduff *et al.* even without the amendment because Dearduff does not disclose the "curve, split, curve" flow path recited in the claims prior to the amendment.

Because the Deardurff *et al.* patent does not disclose each and every element recited in independent claims 8, 19, and 26, it does not anticipate these claims. Claims 9, 11, 17, 22, 24, and 27 depend from and add features to independent claims 8, 19, and 26, and therefore are not anticipated by Deardurff *et al.* for at least the same reasons as claims 8, 19, and 26. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Claims 28-32 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Beaumont *et al.* ("Solving Mold Filling Imbalances in Multicavity Injection Molds"). Applicants respectfully traverse the rejection.

Independent claim 28 recites a flow rotating plug including an inlet conduit having an arcuate path extending between an inlet and an intersection offset from a plane including the primary and secondary runners, and two outlet conduits, each outlet conduit extending in

a curve from the intersection back to the plane and to a respective outlet connected to a respective one of the secondary runners. In summary, claim 28 recites an arcuate inlet conduit extending out of the plane, a split, and then two curved outlet conduits leading back to the plane ("curve, split, curve").

The Examiner relies on Fig. 8 of the Beaumont *et al.* article. However, the Beaumont *et al.* article does not disclose the flow path recited in independent claim 28. Instead, the flow path of Fig. 8 of the Beaumont *et al.* article curves off the plane, then curves back to the plan, then splits. In other words, the Beaumont *et al.* article discloses a "curve, curve, split" flow path, rather than the "curve, split, curve" flow path recited in independent claim 28.

Because the Beaumont *et al.* article does not disclose each and every element recited in independent claim 28, it does not anticipate claim 28. Claims 29-32 depend from and add features to independent claim 28, and therefore are not anticipated by Beaumont *et al.* for at least the same reasons as claim 28. Accordingly, Applicants respectfully request that the rejection be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 10, 18, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Deardurff *et al.* in view of Beaumont *et al.* (U.S. 6,503,438). Claims 10 and 18 depend from independent claim 8, and claim 25 depends from independent claim 19. As discussed above, Deardurff *et al.* does not disclose the features recited in independents claim 8 and 19, namely, the flow path recited. Beaumont *et al.* does not solve the problems noted above

with respect to Deardurff *et al.* Accordingly, even if combined, the combination would not render obvious the claimed invention. Applicants therefore respectfully request that the rejection be withdrawn.

Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Deardurff *et al.* in view of the Beaumont *et al.* article. Applicants respectfully traverse the rejection. The Examiner relies on the Beaumont *et al.* article as disclosing that the melt curves and returns to the first plane at the first and second outlets, and then concludes that it would have been obvious to one of ordinary skill in the art to configure the redistributor of Deardurff *et al.* to incorporate this feature of the "melt flipper" of the Beaumont *et al.* article. However, the Examiner does not explain what modification would be made to the Deardurff *et al.* redistributor to incorporate this feature. Further, the Deardurff *et al.* addresses the same problem of Beaumont *et al.*, but solves it in a different way; by redirecting a portion of the boundary layer (36). It is unclear how the two different methods would be combined.

Further, even if combined in some fashion, the combination would not disclose the features recited in independent claim 8, from which claim 12 depends. In particular, as explained above, independent claim 8 recites a "curve, split, curve" flow path in the flow rotator. Neither, the Deardurff *et al.* patent, nor the Beaumont *et al.* article, discloses such a flow path. Therefore, even if combined, the features recited in independent claim 8 are not disclosed. Accordingly, Applicants respectfully request that the rejection be withdrawn.

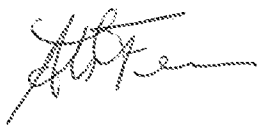
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

MEDLER FERRO PLLC



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